

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/019302

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

A matter common to claims 1-15 is "a polymerization catalyst for conjugated diene polymers which is characterized by comprising (A) a yttrium compound, (B) an ionic compound comprising a non-coordinating anion and cation, and (C) an organometallic compound of an element selected from Groups 2, 12, and 13 of the Periodic Table." However, as a result of a partial research, the common matter was found to be disclosed in the document shown in the attached sheet or be easily attainable by persons skilled in the art based on the document. Consequently, that common matter neither is novel nor involves an inventive step. The common matter cannot hence be regarded as a special technical feature
(continued to extra sheet)

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1

Remark on Protest
the

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, payment of a protest fee..
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/019302

Continuation of Box No.III of continuation of first sheet(2)

in the meaning of Article 13.2 of the Regulations under the PCT. Any other common matter is not considered to be a special technical feature. Therefore, claims 1-15 are not considered to be a group of inventions so linked as to form a single general inventive concept. Furthermore, even when claims 2-15 are successively investigated, no common matter is considered to be a special technical feature in the meaning of Rule 13.2 of the Regulations under the PCT.

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A. CLASSIFICATION OF SUBJECT MATTER

C08F4/52(2006.01), C08F36/06(2006.01), B60C1/00(2006.01), A63B37/00
(2006.01), C08L9/00(2006.01), C08F4/606(2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

C08F4/00-C08F4/82

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2006
Kokai Jitsuyo Shinan Koho	1971-2006	Toroku Jitsuyo Shinan Koho	1994-2006

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CAPLUS (STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 10-324707 A (Bayer AG.), 08 December, 1998 (08.12.98), Claims 1 to 3; Par. Nos. [0015] to [0018]; [0031] to [0033] & US 6284697 B1 & EP 878489 A1	1
X	JP 11-80222 A (Ube Industries, Ltd.), 26 March, 1999 (26.03.99), Claims 1 to 3; Par. Nos. [0016], [0019] to [0029] (Family: none)	1
X	JP 11-181012 A (Ube Industries, Ltd.), 06 July, 1999 (06.07.99), Claims 1 to 2; Par. Nos. [0014], [0017] to [0024] (Family: none)	1

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

13 January, 2006 (13.01.06)

Date of mailing of the international search report

24 January, 2006 (24.01.06)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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PCT/JP2005/019302

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2000-313710 A (The Institute of Physical and Chemical Research), 14 November, 2000 (14.11.00), Claims 1, 3 to 6; Par. Nos. [0009] to [0010], [0019] to [0023], [0025] & US 2003/18144 A1 & US 6596828 B1 & EP 1086957 A1 & WO 2000-52062 A1	1
X	JP 2001-64313 A (The Institute of Physical and Chemical Research), 13 March, 2001 (13.03.01), Claims 1, 3 to 6; Par. Nos. [0008] to [0009], [0018] to [0024] & US 2003/18144 A1 & US 6596828 B1 & EP 1086957 A1 & WO 2000/52062 A1	1